



Original communication

Risk factors in child sexual abuse

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ABSTRACT

Objectives: To quantify the incidence of child sexual abuse allegations referred to a forensic examination centre; to identify possible risk factors predisposing children to sexual abuse by measuring their prevalence among the complainant population.

Methodology: The records of children involved in sexual abuse allegations presenting over a 12 month period were reviewed retrospectively. Demographic data such as nature of case, sex, ethnicity, number of previous allegations, assailant relationship, month of presentation, and age were compiled. Potential risk factors such as alcohol or drug use, being 'looked after', physical disability, learning disability, previous consensual sexual intercourse, past psychiatric history, and history of psychiatric support were compiled. Descriptive statistics were calculated.

Results: 138 cases were recorded, of which the majority were acute. Epidemiological data demonstrated a higher incidence in females and most complainants were of White British origin. Most of the cases were of first allegations and the assailant relationship was most frequently an acquaintance. The incidence was highest in January. The modal age was 15 years and age distribution was positively skewed. Of the potential risk factors studied, alcohol and drug use was the most prevalent. Prevalence increased with age for the majority of factors studied.

Conclusions: Alcohol and drug use may be an area in which preventative strategies would be beneficial. Ethnic minorities may hold a large amount of unreported cases.

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1. Introduction

The Lancashire Sexual Assault Forensic Examination (SAFE) Centre was established in July 2002 on site at Royal Preston Hospital. It offers services to individuals in Lancashire as a joint initiative between Lancashire Teaching Hospitals NHS Foundation Trust and Lancashire Constabulary. This was the United Kingdom's first purpose-built centre combining forensic and medical care for complainants of rape and sexual assault. The Centre offers forensic medical examinations, counselling, assistance, reassurance and support for women, men and children of all ages.

Child sexual abuse is a common occurrence.¹ Child sexual abuse has been defined as "involving forcing or enticing a child or young person to take part in sexual activities, including prostitution, whether or not the child is aware of what is happening. The

activities may involve physical contact, including penetrative or non-penetrative acts. They may include non-contact activities, such as involving children in looking at, or in the production of, sexual online images, watching sexual activities, or encouraging children to behave in sexually inappropriate ways".² The care of complainants of sexual assault requires a multi-agency team. Health services, police, social services and the legal system are all involved. Relevant medical professionals include: forensic physicians; paediatricians; gynaecologists; general practitioners; and child and adolescent mental health services (CAMHS) amongst others.

The presentation of the child varies according to age and can range from sexualised behaviour noticed at school to vaginal bleeding. The paediatric forensic examination consists of: obtaining a thorough history; 'top-to-toe' examination; focused examination; written, graphical and photographic documentation; collecting forensic samples; sexually transmitted infection (STI) screening; arranging aftercare; writing a report; and the insurance that child protection procedures are properly observed.³

Child sexual abuse is thought to be prevalent in all demographic groups but certain risk factors have been identified.¹ A child is

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defined as “an individual who has not reached their eighteenth birthday”, regardless of their social circumstances and medical competency.²

Demographically, it is thought that over 80% of victims of sexual assault do not report it.⁴ Females are more often affected than males.⁵ All cultures, races and societies are thought to be affected by sexual assault and child sexual abuse.⁴ Re-victimisation may occur in as many as 28% of women who had disclosed sexual abuse in childhood.⁶ It has also been suggested that a more temperate climate is accompanied by higher incidence of sexual assault.⁷

At risk groups for sexual assault in general include the young, disabled people, sex workers, the homeless and people living in areas of armed conflict or in institutions.⁸ One study found that a mean of 27.4% of men and 20.4% of women in the general population had first sexual intercourse aged 15 or less.⁹ It is thought that early first intercourse puts individuals at risk of sexually transmitted infections and early pregnancy.¹⁰ There is little evidence suggesting risk of sexual assault with early intercourse. Assaultants are usually known to the victim.⁴

Sexual assault has been linked to alcohol consumption but less so to drugs.⁴ This relationship between alcohol and sexual assault is complex due to both its psychological and physical effects. Alcohol not only decreases motor and cognitive skills but also causes misperceptions of intention, behaviour, risk, and response.¹¹

It is well documented that child sexual abuse can predispose to mental illness later in life¹² but less so the reverse relationship. Do sexually abused children have a history of mental illness? There is little evidence regarding all of these demographic areas and potential risk factors in the more specific paediatric population.

2. Methodology

2.1. Aims

The audit aimed to identify the incidence of child sexual abuse allegations and risk factors in the paediatric complainant population. Demographic details were collected. Non-demographic risk factors were collected by the authors, based on complainant records and risk factors used by Lancashire Constabulary for child sexual exploitation. The study also aimed to determine any differences in risk factors between age groups, identified according to age-dependent management guidelines at the Centre. These age groups (in years) were: 0–6; 7–12; 13–15; and 16–17.

2.2. Participants

All new cases of complainants aged less than 18 years old, who had attended the Lancashire SAFE Centre in the preceding 12 months, were included. Age was defined as that occurring on the date of presentation.

2.3. Procedure

Case records of paediatric complainants were reviewed by the authors and analysed on Microsoft Excel and SPSS (Statistical Package for the Social Sciences) databases. The data was collected from the admission sheet containing information about the current allegation and the medical history sheets. Descriptive statistics were calculated. Risk factors were cross-tabulated by age group. The data collected included the following:

- a) *Demographic*: nature of case (historic/acute); sex (male/female); ethnicity; number of previous allegations; assailant relationship; month of presentation; age (years). Acute or historic cases were defined according to the cut-off point at

Table 1

Ethnicity of complainant in each case.

Ethnicity	All, n = 138	
	N	%
White British	129	93.5
Other black background	2	1.4
Mixed white & Asian	2	1.4
Other white background	1	0.7
Indian	1	0.7
Pakistani	1	0.7
Other Asian background	1	0.7
Other mixed background	1	0.7
White Irish	0	0.0
Chinese	0	0.0
Bangladeshi	0	0.0
Black Caribbean	0	0.0
Black African	0	0.0
Mixed white & black Caribbean	0	0.0
Mixed white & black African	0	0.0
Other ethnic group	0	0.0

which forensic evidence was no longer viable, 2 weeks from the attack.¹³ Assailant relationships were defined as follows: not known – relationship not described by complainant; relative – non-intimate family members and partners, honorary family members or family friends; stranger 1 – no prior contact or where there are brief comments or questions; stranger 2 – briefly known to each other, for example meeting at a bar, in a minicab, over the internet or position of trust; acquaintance – someone known for a period of time; ex-partner – previous consensual sexual relationship; partner – current consensual sexual relationship at time of presentation; prostitution-related – client-prostitute relationship; trafficking-related – where the complainant was being trafficked by the assailant.

- b) *Non-demographic risk factors*: alcohol and drug use at the time of allegation, with or without consent (yes/no); whether or not the complainant was ‘looked after’ (yes/no); physical disability (yes/no); learning disability (yes/no); previous consensual sexual intercourse (yes/no); psychiatric history, including deliberate self harm, deliberate overdose, or attempted suicide (yes/no); and history of use of CAMHS (yes/no).

3. Results

3.1. Demographic data

There were 397 cases over the time period, of which 138 (34.8%) were paediatric. There were 12 males and 126 (91.3%) females. The audit revealed 121 (87.7%) acute cases and 17 historic.

Complainant ethnicity was predominantly White British, as seen in 129 (93.5%) cases (see Table 1). Complainants’ first allegations formed 126 (91.3%) of cases (see Tables 2 and 3). The assailant relationships in order of highest prevalence were: acquaintance (39.1%); relative (28.3%); stranger 2 (18.1%); stranger 1 (7.2%); not known (2.9%); ex-partner (2.2%); and partner (2.2%) (see Methodology). There were no prostitution-related or trafficking-related

Table 2

Number of previous allegations in each case.

Previous allegations	All, n = 138	
	N	%
0	128	92.8
1	8	5.8
2	2	1.4

Table 3
Assailant relationship in each case.

Relationship ^a	All, <i>n</i> = 138	
	N	%
Acquaintance	54	39.1
Relative	39	28.3
Stranger 2	25	18.1
Stranger 1	10	7.2
Not known	4	2.9
Ex-partner	3	2.2
Partner	3	2.2
Prostitution-related	0	0.0
Trafficking-related	0	0.0

^a Key: Not known - relationship not described by complainant; relative - non-intimate family members and partners, honorary family members or family friends; stranger 1 - no prior contact or where there are brief comments or questions; stranger 2 - briefly known to each other, for example meeting at a bar, in a minicab, over the internet or position of trust; acquaintance - someone known for a period of time; ex-partner - previous consensual sexual relationship; partner - current consensual sexual relationship at time of presentation; prostitution-related - client-prostitute relationship; trafficking-related - where the complainant was being trafficked by the assailant.

cases. There were more cases in January than any other month at 18 (13.0%) in number but cases were otherwise evenly distributed throughout the year (see Table 4).

Age at presentation showed a positive skew with a modal age of 15 years (see Fig. 1). The distribution could appear bimodal with the other mode at 3 years. Most cases were in the 13–15 year age group in which there were 61 (44.2%) cases (see Table 5).

3.2. Risk factors

The prevalence of each potential risk factor, from highest to lowest, was: alcohol or drug use at time of allegation (38.4%); previous consensual sexual intercourse (29.0%); history of CAMHS use (17.4%); being 'looked after' (16.7%); psychiatric history, including deliberate self harm, deliberate overdose, or attempted suicide (11.6%); learning disability (6.5%); and physical disability (4.3%). All risk factors increased in percentage frequency with increasing age except for physical disability and learning disability (see Table 6). The number of potential risk factors per case increased with age, however 59 (42.9%) cases had none (see Table 7).

Alcohol and drug use was the most common risk factor as it was present in 38.4% of cases. In cases of sixteen to seventeen year olds, 71.0% were positive for alcohol or drugs. The thirteen to fifteen year olds had the next highest prevalence at 45.5%.

A total of 23 (16.7%) children were 'looked after'. The age group where this was of highest prevalence was the sixteen to seventeen year olds at 25.8%, followed by thirteen to fifteen year olds at 16.7%.

Table 4
Cases presenting per month.

Month	All, <i>n</i> = 138	
	N	%
December	9	6.5
January	18	13.0
February	7	5.1
March	13	9.4
April	14	10.1
May	12	8.7
June	10	7.2
July	12	8.7
August	12	8.7
September	11	8.0
October	11	8.0
November	9	6.5

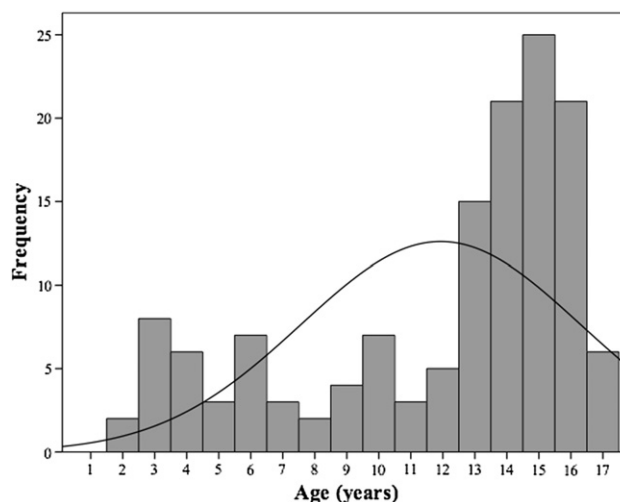


Fig. 1. Distribution of presenting age.

Physical disability was more of a risk factor in the seven to twelve year old age group (8.0%) but had the lowest incidence overall (4.3%). The highest age group was the least at risk.

Learning disability was also most common in the seven to twelve year old age group at 12.0%. The sixteen to seventeen year old complainants had the next highest incidence at 9.7%. The lowest age group was the least at risk.

Previous consensual sexual intercourse had been identified in 45.2% of sixteen to seventeen year olds. Of the thirteen to fifteen year olds, 39.4% were positive for this risk factor. There had been no consensual sexual intercourse in complainants below the age of thirteen.

There was a past psychiatric history of deliberate self harm, deliberate overdose or attempted suicide in 25.8% of sixteen to seventeen year olds, followed in incidence by 12.1% of thirteen to fifteen year olds.

There was a higher incidence of CAMHS use (17.4%) than history of deliberate self harm, overdose or suicide attempt (11.6%). Psychiatric support through CAMHS had been received by 35.5% of sixteen to seventeen year olds prior to their allegations, followed by 18.2% of thirteen to fifteen year olds.

4. Discussion

4.1. Demographic data

It was calculated that a new case was reported every 2.6 days on average from the incidence of 138 cases identified over one year in this study. It must be noted that this was an incidence of allegations and not necessarily abuse itself. However, this supports the claim that child sexual abuse is common. Children formed a large proportion (34.8%) of the Centre's sexual assault cases for the year. Females were particularly at risk, comprising the bulk of the

Table 5
Cases in each age group.

Age (years)	All, <i>n</i> = 138	
	N	%
0–6	26	18.8
7–12	24	18.1
13–15	61	44.2
16–17	27	19.6

Table 6
Prevalence of potential risk factors by age group (N+ indicates number positive).

Risk factor	Age (years)									
	0–6, n = 26		7–12, n = 25		13–15, n = 66		16–17, n = 31		All, n = 138	
	N+	%	N+	%	N+	%	N+	%	N+	%
Alcohol or drugs	0	0.0	1	4.0	30	45.5	22	71.0	53	38.4
Previous consensual sexual intercourse	0	0.0	0	0.0	26	39.4	14	45.2	40	29.0
CAMHS use	0	0.0	1	4.0	12	18.2	11	35.5	24	17.4
'Looked after'	3	11.5	1	4.0	11	16.7	8	25.8	23	16.7
Psychiatric history	0	0.0	0	0.0	8	12.1	8	25.8	16	11.6
Learning disability	0	0.0	3	12.0	3	4.6	3	9.7	9	6.5
Physical disability	1	3.8	2	8.0	3	4.6	0	0.0	6	4.3

complainant population, as described by the literature. Most cases were acute in nature, being reported within two weeks of the allegation. Many factors affect when children present to services; reporting could be delayed by factors such as developmental inability to communicate, feelings of responsibility for their abuse, or 'grooming' prior to the event.¹⁴ There may also have been a greater proportion of unreported historic cases as they are more difficult due to lack of forensic evidence.

The vast majority of cases were of 'White British' complainants but this does not necessarily represent all victims of assault, only those who reported it. There may be many unreported cases occurring in other ethnic groups, given the diverse ethnic background in the Centre's catchment area. There were few cases (7.2%) in which the complainant had made a previous allegation. However, the repeat attendees highlighted that follow-up care from the initial visit may not have been effective and re-victimisation did occur. The assailants were mostly known to the complainants, with acquaintances and relatives being the two most frequent relationships.

The significance of a higher presentation in January is unknown without comparing further data from other years and collecting meteorological data over the year.

The age distribution showed those aged fifteen to be at most risk, with a second peak at age 3. Reasons why these two ages were particularly at risk may be worth exploring in future. Risk increased at a greater rate through the early teens so safeguarding needs to be employed more effectively in this age group.

4.2. Risk factors

Alcohol and drug use was the most prevalent risk factor in a study of cases where all complainants were under the legal age for alcohol consumption (18 years). This needs to be broken down into consensual and non-consensual use before conclusions about underage drinking may be drawn although, anecdotally, it is known

Table 7
Number of risk factors per case, according to age group.

Risk factors	0–6, n = 26		7–12, n = 25		13–15, n = 66		16–17, n = 31		All, n = 138	
	N+	%	N+	%	N+	%	N+	%	N+	%
0	23	88.5	18	72.0	17	25.8	1	3.2	59	42.8
1	4	15.4	2	8.0	14	21.2	8	25.8	28	20.3
2	0	0.0	3	12.0	17	25.8	7	22.5	27	19.6
3	0	0.0	0	0.0	9	13.6	4	12.9	13	9.4
4	0	0.0	0	0.0	2	3.0	3	9.7	5	3.6
5	0	0.0	0	0.0	2	3.0	4	12.9	6	4.3
6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

to be mostly consensual. The data in this study supports claims of a link between alcohol and drugs to sexual assault. Studies have linked underage drinking to a number of predictive factors, such as having higher expendable income and older friends or relatives who can buy alcohol. One protective factor appeared to be having extra-curricular activities.¹⁵ It is thought that children drink for a variety of reasons. Those aged 12–13 do so experimentally, with a desire to shift from the 'childhood' status to a more adult one. As age increases, teenagers are thought to drink more as a coping mechanism for stress and to raise confidence in social situations. Older teenagers have been found to drink to get drunk, with many drinking regularly by the age of 16–17.¹⁶ Some preventative measures have been suggested: eradicating alcohol sales to underage children; supporting parents to provide alcohol and facilitate communication about the topic; and improving parental understanding of their children's spending.¹⁵ Preventing underage drinking and substance use from the age of thirteen could be a valuable option in preventing child sexual abuse.

Over a quarter of cases of sixteen to seventeen year olds were of those who were 'looked after'. Being 'looked after' should not be labelled as a direct risk factor as it is important to consider that there may be multiple other problems and social factors in such a cohort. This high proportion may be a representation of underlying risk.

Disabilities were the least prevalent risk factors explored in this study. They may, however, still be prevalent enough to be risk factors so further statistical analysis may be warranted to determine significance.

Underage consensual sexual intercourse was notable in the data. Rates of first intercourse before the age of 15 were lower in the literature than the 39.4% identified here.¹⁰ This raises the question of whether or not children who are already sexually active are more vulnerable to sexual assault.

There were a high proportion of cases with history of deliberate self harm, deliberate overdose, or attempted suicide and use of CAMHS. The data showed a higher prevalence of CAMHS uptake compared to the prevalence of deliberate self harm, deliberate overdose, or attempted suicide but it must be noted that support may have been for a greater range of mental illnesses than just these three diagnoses. Psychiatric involvement may be not only a consequence of child sexual abuse but could pre-exist in complainants. It is important not to describe CAMHS involvement as a direct risk factor for child sexual abuse but as a representation of underlying social risk.

5. Conclusion

5.1. Summary

The demographics were largely in keeping with the literature. The low incidence of cases in other ethnic groups prompts questions as to whether there are more unreported cases ethnic minorities than the general population. The risk factors proposed were found to occur in child sexual abuse cases but further investigation is required to determine their statistical significance in comparison to the 'normal' paediatric population. Data from other years and from many centres would allow valuable comparison.

There were five key findings of this study:

- Alcohol and drug use was a prominent factor in child sexual abuse cases.
- Early first intercourse was also present in a large proportion of cases and may also be a risk factor.
- Ethnic minorities may account for many cases of child sexual abuse that are not being reported to services.

- d. The number of potential risk factors in children increased with increasing age, as did the incidence of abuse.
- e. There was little academic work available when researching this article.

5.2. Recommendations

1. More intense educational input into the risks of underage drinking and drug use may be the key to preventing a significant number of cases, as this risk factor was by far the greatest.
2. Increasing the age of first intercourse with a heavier input into sex education may be of benefit in prevention of child sexual abuse.
3. Raising awareness about services for victims in ethnic minority communities may be of use.
4. Could early identification of potential risk factors help in the prevention of child sexual assault?
5. Risk factors for child sexual abuse would benefit from future research in order to expand the limited information currently available.

Ethical approval

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Conflicts of interest

The authors declare no conflicts of interest.

The authors declare that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible

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